3.7 Less common gastroenteric infections

Listeriosis

In 2015, 19 cases of listeriosis were notified, an increase compared to 2014 and 2013 when 15 and 8 cases were reported, respectively. For 2015, this equates to a crude incidence rate of 0.41 per 100,000 population which remains below the EU average of 0.48 per 100,000 for the same year.¹

In 2015, two neonatal cases and three pregnancy-related cases were reported (Figure 1). The number of adult/juvenile cases reported in 2015 increased by 75% (n=14) compared with 2014 (n=8) and it was the highest since listeriosis became notifiable as a specified disease in 2004 (Figure 1). Eight of the fourteen adult/juvenile cases were male, cases ranged in age from 16 months to 87 years and 64% (n=9) of these cases were 65 years of age and older. Five adult/juvenile cases had septicaemia, three had meningitis and

two had both. Two patients died, one death was due to listeriosis and for the second death the cause of death was unknown but the patient had an underlying illness.

Since 2007, the National *Salmonella*, *Shigella* and *Listeria* Reference Laboratory (NSSLRL) in Galway provides a national service for the typing of *Listeria* strains. In 2015, isolates from fifteen of the 19 notified cases were referred by the primary laboratories for serotyping. Serotype 4b was the most common (n=8) followed by serotype 1/2a (n=6) (Table 1).

In Ireland, listeria remains a hazard for the elderly, persons with underlying illness, and other vulnerable groups such as pregnant women and neonates.



Figure 1: Number listeriosis notifications by case type, Ireland, 2004-2015

Table 1: Listeriosis notifications by case type and serotype, Ireland, 2015*							
Туре	Serotype 1/2a	Serotype 1/2b	Serotype 4b	Not referred for serotyping	Total		
Adult or juvenile	5	1	5	3	14		
Pregnancy-related	0	0	2	1	3		
Neonatal	1	0	1	0	2		
Total	6	1	8	4	19		

* Typing data provided by the National Salmonella, Shigella and Listeria Reference Laboratory (NSSLRL)

Giardiasis

In 2015, there were 146 cases of giardiasis notified, corresponding to a crude incidence rate (CIR) of 3.2 per 100,000 population and representing a doubling of CIR. This increase appears to be largely due to the introduction of molecular methods for multi-pathogen screening of stool samples during 2015. In a recent laboratory survey conducted by HPSC, seven laboratories reported the introduction of such methods during 2015. This is likely to have led to an increased number of stool specimens tested for Giardia since 2015.

Cases ranged in age from one month-90 years with a median age of 30 years. Between 2004 and 2014, the highest age specific incidence rates (ASIR) occurred in the 0-4 years age group (mean = 3.0/100,000). This increased from 3.6 in 2014 to 7.0 in 2015. The 2nd highest ASIR in 2015 was observed in those aged 25-34 years at 4.8, an increase compared to 2.6 in 2014 and a mean ASIR of 2.0 between 2004 and 2014. Other age groups that reported large increases in the ASIR during 2015 compared to the mean ASIR between 2004 and 2014, were those aged 5-14 years (2015: 7.0 vs mean 3.0) and those aged 65 years and older (2015: 3.0 vs mean: 0.5).

The male to female ratio was 1.5:1.0, but was higher for non-travel associated cases (1.9:1.0) compared to travel associated cases (1.2:1.0). The majority of cases were diagnosed in GP patients (60.0%).

Country of infection was reported for 66.2% of cases in 2015, a decrease compared to 69.0% in 2014 (Figure 2). Of the 96 cases where country of infection was reported 47 (49.0%) were reported as being associated with foreign travel. The most commonly reported countries of infection were India (n=13) and Spain (n=6), two cases each were reported from Lebanon and Pakistan and there was one case each reported associated with travel to 12 other countries. Forty-nine cases (51.0%) were reported as being acquired in Ireland, a marked increase compared to 32.7% in 2014. The remaining 49 cases (33.8%) did not report country of infection.

Four family outbreaks of giardiasis were notified in 2015, all of which occurred in private houses. Three outbreaks

reported waterborne transmission and one was considered to be due to person to person transmission.

Yersiniosis

In 2015, there were 13 cases of yersiniosis reported, a sharp increase compared to five cases reported in 2014 and four cases in 2013. This increase is mainly due to a research project in a regional laboratory which used a molecular method for multi-pathogen screening of faecal samples during 2014. This research resulted in an unexpectedly high yield of *Yersinia* positive specimens which prompted further testing during 2015. Table 2 outlines the age and sex distribution of cases in 2015. One was reported as being infected with *Y. pseudotuberculosis* and 12 were *Y. enterocolitica*. The reported incidence of yersiniosis in Ireland is low relative to the EU as a whole, and to Northern Europe in particular.

Table 2: Number of yersiniosis notifications by sex and age group, 2015

Age group	Female	Male	Total
0-4 yrs		2	2
5-14 yrs	1	3	4
25-34 yrs	1	1	2
45-54 yrs		1	1
55-64 yrs		1	1
65+ yrs	1	2	3
Total	3	10	13

Foodborne intoxications

Notifications of foodborne intoxications in Ireland are uncommon. There was one case of *Bacillus cereus* foodborne infection notified in an infant in 2015. There were no cases or outbreaks of botulism, *Clostridium perfringens* (type A) foodborne intoxication or staphylococcal food poisoning notified in 2015.

References

1. ECDC. Surveillance Atlas of Infectious Diseases. Available at http://atlas. ecdc.europa.eu/public/



Figure 2: Number of giardiasis notifications by country of infection, 2004-2015